

## A NORTHERN CYNOGLOSSUM.

M. L. FERNALD.

*Cynoglossum virginicum* L., as accepted by American botanists, is supposed to extend northward into the Maritime Provinces and southward to Florida and Louisiana, a range much broader than is covered by most of our Eastern plants. In New England and eastern Canada, where the introduced *C. officinale* often abounds, the indigenous species of *Cynoglossum* is very local, and it is only occasionally that one has an opportunity to study the native plant in the field. In July, 1905, however, while ascending with Messrs. E. F. Williams and J. F. Collins, the Little Cascapedia River in the County of Bonaventure, Quebec, I found a colony of the plant growing under larches in dry sandy alluvium. The characteristic species of the alluvium, *Arnica mollis*, *Dryas Drummondii*, *Astragalus frigidus*, var. *americanus*, *Sisyrinchium montanum*, *Calamagrostis Scribneri*, etc., were all high-northern or Rocky Mountain species; and it was, therefore, surprising to find with them a plant supposed to extend to Florida and the lower Mississippi.

Later study of the plant from the Little Cascapedia shows that in many points it differs from the plant of the Southern and Middle States, though it is quite like that of adjacent Canada, northern New England and New York, the Great Lakes and the northern Rocky Mountains. The more southern plant, the true *Cynoglossum virginicum* of Linnaeus, possibly extends into western New England, and plants under that name have been reported from western Massachusetts and Connecticut. Mr. E. B. Chamberlain in his study of the New England *Boraginaceae*,<sup>1</sup> however, was unable to verify the reports and the most northern material at hand comes from New Jersey and Pennsylvania. From there it extends southward, mostly in deciduous woods to the Gulf of Mexico, and west to Missouri and Texas. It is villous-hispid nearly to the inflorescence, and all but the very lowermost leaves are clasping. In anthesis its calyx is 3.5–4.5 mm. long; and its corolla 10 or 12 mm. broad, with suborbicular lobes and closed sinuses. The strongly echinate compressed orbicular-obovoid nutlets are cuneate at base, 7–9 mm. long.

<sup>1</sup> RHODORA, iii. 214.



In the northern plant, which usually occurs in coniferous woods, the slender peduncles are mostly appressed-pubescent, and the transition is more gradual than in *Cynoglossum virginicum* from the lower long-petioled to the upper amplexicaul leaves. The calyx in anthesis is 2–2.5 mm. long; the corolla 6–8 mm. broad, with ovate-oblong lobes and open sinuses; and the compressed pyriform-obovoid nutlets are 4–5 mm. long. This northern plant is of broad range in Canada and the Northern States, while the southern *Cynoglossum virginicum* is only doubtfully reported from southern New England. That the two are distinct species seems clear from the characters above enumerated, and the northern plant may be distinguished as

**CYNOGLOSSUM boreale**, sp. n. Planta 4–8 dm. alta; caule basi villosa-hispido, pedunculis elongatis (usque ad 1–2 dm. longis) appresso-pubescentibus; foliis radicalibus ellipticis vel lanceolato-ovalibus 1–3 dm. longis hispidis lamina petiolo fere aequanti, caulinis in petiolum brevem attenuatis vel subamplexicaulibus, superioribus oblongis 7–16 cm. longis basi auriculis rotundatis amplexicaulibus; racemis geminis 4–8-floris deinde 1–2 dm. longis; pedicellis fructiferis patente recurvis infimis 1.5–3 cm. longis; calycibus appresso-pubescentibus 2–2.5 mm. longis, lobis ovato-lanceolatis; corollis 6–8 mm. latis, lobis ovato-oblongis; nuculis tumidis ovoideo-pyriformibus glochidiato-echinatis 4–5 mm. longis. — QUEBEC, beneath *Larix* in sandy alluvial woods, Little Cascapedia River, July 17, 1905 (*Williams, Collins & Fernald*): NEW BRUNSWICK, gorge of Aroostook River, July 17, 1902 (*Williams, Collins & Fernald*): MAINE, woods, Orono, June 17, 1873 (*F. Lamson-Scribner*), June 5, 1898 (*E. D. Merrill*); open woods, South Chesterville, June 23, 1902 (*L. O. Eaton*); Harrison (*A. P. Chute*): NEW HAMPSHIRE, Franconia, June 16, 1886, June 14, 1887 (*E. & C. E. Faxon*): VERMONT, Bristol, May 26, 1898, and woods near Lake Dunmore, Salisbury, June 2, 1898 (*E. Brainerd*): NEW YORK, Salamanca (*G. W. Clinton*): MICHIGAN, Sault Ste. Marie, June, 1831 (*Houghton*); Copper Harbor, August, 1885 (*O. A. Farwell*, no. 295): ONTARIO, sandy woods, Nipigon River, July 3, 1884 (*J. Macoun*): BRITISH COLUMBIA, Donald, Columbia Valley, July 3, 1885 (*J. Macoun*).

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